

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges amendment filed on 03/06/2008 by Applicant.

Response to Arguments

2. Applicant's arguments pertaining to independent claims 21 and 31, filed 03/06/2008, have been fully considered and are persuasive. The rejections of claims 21-28 and 31-38 have been withdrawn. Examiner now considers claims 21-42 allowable.

Allowable Subject Matter

3. **Claims 21-42** are allowed.
4. The following is an examiner's statement of reasons for allowance:

Regarding claims 21, 31, 41, and 42, the prior art of record fails to teach a docking guidance system wherein a horizontal indicator is fixed relative to a docking station and is viewed along an inclined line of sight from the vehicle against the background of a vertical array of a multiplicity of horizontal rows of light sources spaced at a distance behind the horizontal indicator, **the light sources being energized selectively by row to emit light that defines a horizontal datum in the array.** A vehicle maneuvers

towards the docking station until the vertical separation between the horizontal indicator and the horizontal datum is zero and the two are visually aligned.

US Patent No. 4,015,235 (Demaine et al.) teaches an aircraft parking guidance system wherein an illuminated target positioned behind a fixed stop aperture along a line of sight of the pilot which is inclined to the direction of approach. As the aircraft advances, the illuminated target changes from all green, then to mostly green, and finally to half green and half red when the aircraft is perfectly positioned. However, Demaine is not obvious over the instant invention because Demaine does not expressly teach a vertical array of a multiplicity of horizontal rows of light sources spaced at a distance behind the horizontal indicator, nor does Demaine teach the light sources being energized selectively by row to emit light that defines a horizontal datum in the array.

US Patent No. 5,291,195 (Gross) teaches a target light for docking wherein three concentric circles each comprising a plurality of different color light emitting diodes. During vehicle approach, each circle appears initially as a light spot, then a continuous ring of light and finally a plurality of independent light points at defined distances of the vehicle from the station so that the operator can determine distance of the vehicle to the target. In this case, Gross is not obvious over the instant invention because Gross does not expressly teach a vertical array of a multiplicity of horizontal rows of light sources spaced at a distance behind the horizontal indicator, nor does Gross teach the light

sources being energized selectively by row to emit light that defines a horizontal datum in the array.

US Patent No. 3,873,210 (Konopka) teaches an optical device for vehicular docking wherein a fixed display has a horizontal indicator, indicating the current vertical placement of the vehicle against multiples references, each reference designated with a plane type, so that the operator of a plane can guide the horizontal indicator to align with the appropriate reference line. However, Konopka is not obvious over the instant invention because Konopka does not expressly teach a vertical array of a multiplicity of horizontal rows of light sources spaced at a distance behind the horizontal indicator, nor does Konopka teach the light sources being energized selectively by row to emit light that defines a horizontal datum in the array.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KERRI L. MCNALLY whose telephone number is

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(571)270-1840. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Davetta Goins can be reached on 571-272-2957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KLM
/Davetta W. Goins/
Acting SPE of Art Unit 2612